

**Listing of the Claims:**

1. (Currently Amended) A computer-implemented method for increasing the performance of a virtual machine, the computer-implemented method comprising:

obtaining, by an interpreter, a program instruction to be executed by the virtual machine;

determining, by the interpreter, ~~when~~ whether the program instruction is a branch instruction;

determining ~~when~~ by the interpreter, whether a basic block is present in a code cache when it is determined that the program instruction is a branch instruction, the basic block being associated with a case block of the interpreter and including code, the code cache being associated with the virtual machine; [[and]]

interpreting by the interpreter the code associated with said case block when it is determined that the basic block is not present in the code cache, wherein the interpreting generates native code for said case block;

copying by the interpreter said native code associated with said code into said cache code after said interpreting of said code; and

executing, by the interpreter, the code included in the basic block from said code cache when it is determined that the basic block is present in the code cache and the program instruction is a branch instruction.